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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,434	01/30/2004	Kevin Michael Goodwin	200208937-1	7237

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EXAMINER

FARROKH, HASHEM

ART UNIT	PAPER NUMBER
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2187

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/767,434

Applicant(s)

GOODWIN, KEVIN MICHAEL

Examiner

Hashem Farrokh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7, 11, 12, 17, 19-21, 24 and 25 is/are rejected.
- 7) ☒ Claim(s) 5, 6, 8-10, 13-16, 18, 22 and 23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

*The instant application having application No. 10/767,434 has a total of 25 claims pending in the application; there are 5 independent claims and 20 dependent claims, all of which are ready for examination by the examiner.*

**INFORMATION CONCERNING CLAIMS:**

***Claim Rejections - 35 USC § 102***

*The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:*

*A person shall be entitled to a patent unless –*

*(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.*

*Claims 1-4, 7, 11-12, 17, 19-21, and 24-25 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Application No. 2002/0078295 A1 to Saath et al. (hereinafter Saath).*

1. *In regard to claim 1 Saath teaches:*

*“A method of selectively establishing read-only access to a volume of a storage-device,” (e.g., see paragraph 47 in page 3; paragraph 66 in page 4; Fig. 3). Saath teaches a method implemented in the operating system for supporting or establishing the limited access to data file including read-only access. Saath discloses a file object or data represents a volume recited in the claim.*

*“the method comprising:”*

“receiving an input/output request packet (IRP) that is traversing a stack of device objects representing a storage-device;” **(e.g., see paragraph 44 in page 3).** *For example the file system driver receives the input/output request packet (IRP) from the I/O manager.*

“determining the type of access being requested via the IRP;” **(e.g., see paragraph 44 in page 3).** *The file system driver accesses its I/O stack location to determine what type of operation to be executed.*

“and selectively failing the IRP depending upon the requested-type of access.” **(e.g., see paragraph 66 in page 4).** *For example Saath teaches that if a data store is read-only, a request to delete the file is blocked and error message is returned which represents the failing IRP recited in the claim.*

2. *In regard to claim 2 Saath teaches:*

“wherein the selectively failing step fails the IRP if the requested-type of access is something other than read-only access.” **(e.g., see paragraph 67 in page 4).**

3. *In regard to claims 3, 11, and 19 Saath teaches:*

“checking whether the IRP is of a type meriting scrutiny;” **(e.g., see paragraph 52 in page 4).**

“and skipping the determining and selectively-failing steps if the IRP does not merit scrutiny.” **(e.g., see paragraph 74 in page 5; Fig. 5).** *For example the type of request*

*checked, if it is determined that the storage medium supports the requested operation the operation requested is performed.*

4. *In regard to claims 4, 12, and 20 Saath teaches:*

“the checking step inspects whether the IRP includes the major function code IRP\_MJ\_CREATE;” (e.g., see **paragraph 60 in page 4**).

“and the skipping step skips if the IRP does not include IRP\_MJ\_CREATE.” (e.g., see **paragraph 60 in page 4**). *For example Saath discloses that NT device and the intermediate driver support IRP\_MJ\_CREATE request.*

5. *In regard to claim 7 Saath teaches:*

“A method of selectively restricting access to a volume of a storage-device (e.g., see **paragraph 47 in page 3; paragraph 66 in page 4; Fig. 3**), the method comprising:”

“receiving a first input/output request packet (IRP) that is traversing a stack of device objects representing a storage-device;” (e.g., see **paragraph 44 in page 3**).

“determining the type of access being requested via the first IRP;” (e.g., see **paragraph 44 in page 3**).

“and selectively failing the first IRP according to a volume-ID identified found in the IRP and the type of access requested by the IRP.” (e.g., see **paragraph 66 in page 4**).

6. *In regard to claim 17 Saath teaches:*

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“A method of selectively establishing read-only access to a volume of a storage-device (e.g., see paragraph 47 in page 3; paragraph 66 in page 4; Fig. 3), the method comprising:”

“receiving an input/output request packet (IRP) that is traversing a stack of device objects representing a storage-device;” (e.g., see paragraph 44 in page 3).

“determining whether the received IRP is a set-status IRP for setting an operational status of a filter to be one of ON or OFF;” (e.g., see paragraph 44 in page 3; paragraph 66 in page 4; Fig. 3).

“and setting, if the IRP is a set-status IRP, the operational status of the filter according to the set-status IRP.” (e.g., see paragraph 45 in page 3).

7. *In regard to claim 21 Saath teaches:*

“wherein the filter examines an IRP for at least one of the following criteria: a type of access to the volume which the received IRP represents;” (e.g., see paragraph 51 in page 3).

“and a volume-ID for the particular volume of the storage-device which the stack represents.”

8. *In regard to claim 24 Saath teaches:*

“A machine-readable medium including instructions execution of which by a machine selectively establishes read-only access to a volume of a storage-device (e.g., see

**paragraph 47 in page 3; paragraph 66 in page 4; Fig. 3), the machine-readable instructions comprising:**

**“a code segment for receiving an input/output request packet (IRP) that is traversing a stack of device objects representing a storage-device;” (e.g., see paragraph 44 in page 3).**

**“a code segment for determining the type of access being requested via the IRP;” (e.g., see paragraph 44 in page 3).**

**“and a code segment for selectively failing the IRP depending upon the requested-type of access.” (e.g., see paragraph 66 in page 4).**

9. *In regard to claim 25 Saath teaches:*

**“An apparatus for selectively establishing read-only access to a volume of a storage-device (e.g., see paragraph 47 in page 3; paragraph 66 in page 4; Fig. 3), the apparatus comprising:”**

**“a memory in which is created the stack of device objects representing a storage-device, the stack including a filter device object (DO);” (e.g., see paragraphs 50-51 in page 4).**

**“filter driver means for assessing the type of access being requested via an input/output request packet (IRP) arriving at the filter DO, and selectively failing the IRP according to the requested-type of access.” (e.g., see paragraph 66 in page 4).**

**ALLOWABLE SUBJECT MATTER**

*Claims 5-6, 8-10, 13-16, 18 and 22-23 are objected to as being dependent upon rejected based claims, but would be allowable if rewritten in correct and independent form including all of the limitations of the base claim and any intervening claims.*

1. *The primary reason for allowance of claims 5-6 and 13-14 in instant application is the combination with the inclusion of the following limitations: **checking (inspecting) the one or more access fields for contents indicating that the type of access being requested is something other than read-only access.***

2. *The primary reason for allowance of claim 8 in instant application is the combination with the inclusion of the following limitations: **generating and sending, if the volume-ID has not been obtained, a second IRP representing a request to obtain the volume-ID; and receiving, in response to the second IRP, the volume-ID.***

3. *The primary reason for allowance of claims 9 and 10 in instant application is the combination with the inclusion of the following limitations: **checks the desired read-state of the volume based on the volume-ID, and fails the IRP if the desired read-state is read-only and the requested access is something other than read-only access.***

4. *The primary reason for allowance of claim 15 in instant application is the combination with the inclusion of the following limitations: **the ascertaining step***



**checks one or more bits in an unreserved area of the device object to ascertain whether the volume-ID has been obtained.**

5. The primary reason for allowance of claim 16 in instant application is the combination with the inclusion of the following limitations: **wherein the volume-ID is the volume label.**

6. The primary reason for allowance of claim 18 in instant application is the combination with the inclusion of the following limitations: **the determining step includes inspecting one or more bits in an unreserved area of the IRP to ascertain if the IRP is a set-status IRP.**

7. The primary reason for allowance of claim 22 in instant application is the combination with the inclusion of the following limitations: **wherein the setting step sets the operational status by toggling the operational status.**

8. The primary reason for allowance of claim 23 in instant application is the combination with the inclusion of the following limitations: **wherein the setting step sets the operational status to be that of a desired operational status identified in the IRP.**

**: IMPORTANT NOTE :**

*If the applicant should choose to rewrite the independent claims to include the limitations recited in either one of the claims, the applicant is encouraged to **amend the title of the invention** such that it is descriptive of the invention as claimed as required by sec. 606.01 of the MPEP. Furthermore, the **summary of invention** and the **abstract***

*should be amended to bring them into harmony with the allowed claims as required by paragraph 2 of **sec. 1302.01** of the **MPEP**.*

*As allowable subject matter has been indicated, applicant's response must either comply with all formal requirements or specifically traverse each requirement not compiled with. See **37 C.F.R. § 1.111(b)** and **§ 707.07(a)** of the **M.P.E.P.***

### **Conclusion**

*The prior art made of record and not relied upon are as follows:*

- 1. U. S. Patent No. 5,606,681 to Smith et al. describes Method and device implementing software virtual disk in computer RAM that uses a cache of IRPs to increase system performance.*
- 2. U. S. Patent Publication No. 2002/0069245 A1 to Kim describes Disk system adapted to be directly attached to network.*
- 3. U. S. Patent Publication No. US 2005/0149525 A1 to Verma et al. describes Transactional file system.*

*Any inquiry concerning this communication should be directed to Hashem Farrokh whose telephone number is (571) 272-4193. The examiner can normally be reached Monday-Friday from **8:00 AM to 5:00 PM**.*

*If attempt to reach the above noted Examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Donald A Sparks, can be reached on (571) 272-4201. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published*

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*application may be obtained from either private PAIR or Public PAIR. Status information for unpublished application is available through Private PAIR only. For more information about PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBS) at 866-217-9197 (toll-free).*

HF

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2006-04-15

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